

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

-----X

In the Matter of

Ravenswood Development, LLC

Case No. 19-E-_____

Petition for an Order Granting a Certificate of
Public Convenience and Necessity and
Establishing a Lightened Regulatory Regime.

-----X

**PETITION FOR ORDER GRANTING CERTIFICATE OF
PUBLIC CONVENIENCE AND NECESSITY AND
ESTABLISHING LIGHTENED REGULATORY REGIME**

Michael G. Murphy
John H. Paul
Beveridge & Diamond, P.C.
477 Madison Avenue, 15th Floor
New York, New York, 10022
(212) 702-5400
Mmurphy@bdlaw.com
Jpaul@bdlaw.com
Attorneys for Ravenswood Development, LLC

Dated: February 21, 2019

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

-----X

In the Matter of

Ravenswood Development, LLC

Case No. 19-E-_____

Petition for an Order Granting a Certificate of
Public Convenience and Necessity and
Establishing a Lightened Regulatory Regime.

-----X

**PETITION FOR ORDER GRANTING CERTIFICATE OF PUBLIC
CONVENIENCE AND NECESSITY AND
ESTABLISHING LIGHTENED REGULATORY REGIME**

I. INTRODUCTION

Ravenswood Development, LLC (“Ravenswood Development”) is seeking to develop a stand-alone, battery-based, energy storage facility with a capacity of up to approximately 316 megawatts (“MW”) (“Project”) on a portion of the Ravenswood Generating Station property in Long Island City, Queens, New York.¹ Ravenswood Development respectfully submits this petition for an Order: (1) granting a Certificate of Public Convenience and Necessity (“CPCN”) pursuant to Section 68 of the Public Service Law (“PSL”) and 16 NYCRR Part 21 to develop, operate, and own the Project; and (2) providing that Ravenswood Development will be regulated under a lightened regulatory regime consistent with the Commission’s orders providing for lightened regulation for competitive wholesale market participants.²

¹ A site location map is attached hereto as *Exhibit 1*.

² Ravenswood Development plans to submit a separate petition for financing approval under PSL § 69.

The Project would not generate any new electricity, but would store electricity drawn from the grid and generated by other facilities. Stored energy would then be released to the grid in accordance with New York Independent System Operator's ("NYISO") and Consolidated Edison Company of New York, Inc.'s ("ConEd") dispatch orders. The proposed energy storage facility would be able to provide peak capacity, energy and ancillary services, offset more carbon-intensive on-peak generation with power stored during the off-peak period, and enhance grid reliability in New York City. Ravenswood Development's proposal represents a unique opportunity to achieve reductions in greenhouse gas emissions and expand clean energy resource use, consistent with the State's goals as articulated through, among other things, the Renewing the Energy Vision initiative, Clean Energy Standard, PSL § 74 (*Energy Storage Deployment Policy*), and the Commission's December 2018 Order establishing an Energy Storage Deployment Program. The Project is proposed to be developed in three phases which will allow Ravenswood Development to deploy the Project in support of emerging public policies, regulatory initiatives and market developments in relation to energy storage.

The Project would be developed in an area of the Ravenswood Generating Station that currently is occupied in part by peaker units, most of which are currently not in service. During construction, the Project would require between 100 and 120 skilled construction workers to support peak construction periods.

The Project will not cause any significant adverse environmental impacts during construction or operation. The Project is compatible with existing land uses, and it will avoid or minimize adverse effects to air quality, water resources, noise, traffic and transportation, visual resources, community facilities and natural resources. In fact, the facility would displace energy produced from fossil plants during peak periods, resulting in lower overall air emissions.

Correspondence and other communications concerning this filing should be directed to:

Michael Vogt
c/o LS Power Development, LLC
16150 Main Circle Drive, Suite 310
Chesterfield, MO 63017
(636) 532-2200

and

James D'Andrea, Esq.
c/o LS Power Development, LLC
1700 Broadway, 35th Floor
New York, NY 10019
(212) 615-3456

and to Ravenswood Development's counsel:

Michael Murphy, Esq.
John H. Paul, Esq.
Beveridge & Diamond, P.C.
477 Madison Avenue, 15th Floor
New York, New York, 10022
(212) 702-5400

II. THE APPLICANT

Ravenswood Development is a limited liability company, organized under the laws of the State of Delaware and is registered to do business in the State of New York. Ravenswood Development was formed to construct, own, and operate the proposed Project. *Exhibit 2* is a certified copy of Ravenswood Development's Certificate of Formation from the State of Delaware, as well as a copy of its registration to do business in the State of New York as a foreign limited liability company.

Ravenswood Development is a wholly-owned subsidiary of Helix Ravenswood, LLC ("Helix Ravenswood"). Helix Ravenswood, a lightly regulated electric corporation, owns the real property at the Ravenswood Generating Station, and owns or holds a leasehold interest in and

operates the generating facilities situated thereon. Helix Ravenswood is an indirect wholly-owned subsidiary of Helix Generation, LLC (“Helix Generation”).

Helix Generation was formed as a Delaware limited liability company to directly (or indirectly through one or more controlled affiliates) acquire and hold the membership interests of the entities that own and/or operate the assets at the Ravenswood Generation Station. Helix Generation is a direct subsidiary of LS Power Equity Partners III, L.P., a New York-based Delaware limited partnership, wholly controlled by LS Power Development, LLC (“LSP Development”), a Delaware limited liability company.

LSP Development develops, owns, and operates independent power projects in the United States and also develops independent transmission projects in parts of the United States. Other than its indirect ownership of the Ravenswood Generating Station, LSP Development does not own or control, nor does it have any subsidiaries that own or control, generation facilities in the NYISO market.³

LSP Development is affiliated with Texas-based LifeEnergy, LLC, a power marketing company that provides energy products and services to residential and commercial customers in Delaware, Illinois Maryland, New Jersey, Ohio, Pennsylvania and Texas. LifeEnergy may expand its operations into other states including New York State. LifeEnergy does not own generation or transmission assets in NYISO. The capacity of the Project will not be marketed by LifeEnergy. LSP Development is also affiliated with Enerwise Global Technologies, Inc. (trade name *CPower*). CPower provides demand-side energy management services to commercial,

³ LSP Development does have indirect subsidiaries that own or control generation facilities in other markets including PJM and ISO-NE.

industrial and government organizations. CPower will not market energy provided by the Project.

III. THE RAVENSWOOD DEVELOPMENT PROJECT

A. Project Site

Ravenswood Development is seeking to construct, own and operate a stand-alone, battery-based, energy storage facility with a capacity of up to approximately 316 MW at the existing Ravenswood Generating Station in Long Island City, Queens, New York. The Ravenswood Generating Station, which is located at 38-54 Vernon Boulevard, consists of approximately 27 acres of land. *See Exhibit 1.* As discussed in more detail in Section IV *infra*, the land is zoned industrial for heavy manufacturing purposes (M3-1 district).

The Project will be located on an approximately 7-acre portion of land (“Project Site”) in the northern section of the Ravenswood Generating Station parcel. The Project Site is bordered by the Roosevelt Island Bridge Access and Con Edison’s Rainey Substation to the north, Vernon Boulevard to the east, the main Ravenswood Generating Station to the south, and the East River to the west. Con Edison’s Vernon Substation is adjacent to the Ravenswood Generating Station property to the south.

The surface topography of the Project Site is relatively flat with a gentle slope from east to west across the site. Surface elevations range from approximately 9 feet above mean sea level (“MSL”) to approximately 20 feet above MSL. Lower elevations are along the western edge of the site, adjacent to the East River; higher elevations occur along Vernon Boulevard. Storm water runoff is generally from east to west towards the East River except where obstructed by the generating buildings. In areas with stone cover, storm water is able to percolate into the ground.

As noted above, Helix Ravenswood owns the real property at the Ravenswood Generating Station, and owns or holds a leasehold interest in and operates the existing generating facilities on the site. Electricity generated by the existing units is sold into the wholesale market, pursuant to market-based rate authority and in accordance with NYISO procedures. It is distributed through the transmission grid owned and operated by ConEd. Units 10 and 20 commenced operation in the early 1960's and have a combined nameplate capacity⁴ of 800 MW. Unit 30 was placed into service in the mid-1960's and has a nameplate capacity of 1027 MW. Units 10, 20 and 30 primarily operate on natural gas with low-sulfur No. 6 fuel oil used as a backup.⁵ Unit 40, which received a Certificate of Environmental Compatibility and Public Need pursuant to the since-expired Article X of the Public Service Law, has a nameplate capacity of 250MW and commenced operation in 2004. *See* Case 99-F-1625, *KeySpan Energy*, Opinion and Order Granting a Certificate of Environmental Compatibility and Public Need (Sept. 7, 2001). The majority interest in Unit 40 is owned by a third party unaffiliated with the Helix companies, and a small interest in Unit 40 is owned by Unit 40 Sublessor, LLC.⁶ Unit 40 uses natural gas as its primary fuel with ultra-low sulfur No. 1 or 2 distillate fuel oil as a backup. The proposed Project would be to the north of and therefore outside the footprint of the Unit 40 facility.

⁴ The nameplate capacity amounts referenced in this filing were taken from the New York Independent System Operator 2017 Load and Capacity Data Report ("Report") and can be found at the following link (see p. 54-55): <https://www.nyiso.com/documents/20142/2226333/2018-Load-Capacity-Data-Report-Gold-Book.pdf/7014d670-2896-e729-0992-be44eb935cc2>. Summer and Winter Capabilities are also listed in the Report.

⁵ Back-up fuel supply for these units is being transitioned to No.4 fuel oil and eventually to No.2 fuel oil.

⁶ An affiliate of Helix Ravenswood, Unit 40 Sublessor, LLC ("Unit 40 Sublessor"), was formed to facilitate a sale/leaseback financing arrangement, through which Unit 40 Sublessor leases Unit 40 to Helix Ravenswood. Unit 40 Sublessor's role is entirely passive.

Ravenswood Development will enter into an agreement with Helix Ravenswood to permit it to develop the portion of the lot for the energy storage Project.

Ravenswood Generating Station also hosts a series of peaker units with a total nameplate capacity of 393.9 MW. These units were placed into service between 1967 and 1970. Of these, sixteen existing, combustion turbines and associated equipment (Gas Turbine [GT] 04, 05, 06, 07, 08, 09, 10, 11, 2-1, 2-2, 2-3, 2-4, 3-1, 3-2, 3-3, and 3-4) currently lie within the 7-acre Project Site for a total of 375.3 MW. One unit (GT 1), with a nameplate capacity of 18.6 MW, is located on the other side of the property close to ConEd's Vernon Substation. Completion of all three phases of the Project therefore will require the demolition of the sixteen units within the Project Site. Of these units, GT 04, 05, 06, 07, 08, 09, 2-1, 2-2, 2-3, 2-4, 3-1, 3-2, 3-3, and 3-4 currently are not in service; GT 10 and 11 currently are in service but used infrequently. Completion of all three phases of the Project will therefore replace up to 316 MW of these existing combustion turbines' capacity on the New York electric system.

Pursuant to a long-term lease, ConEd leases a portion of the Ravenswood Generating Station real property from Helix Ravenswood for its Boiler "A" House. ConEd owns and operates the Boiler "A" House and certain other steam facilities on the Ravenswood Generating Station site as well as certain facilities associated with its natural gas and electric businesses. The proposed Project will not impact ConEd's Boiler "A" House operations.

B. Ravenswood Development Project Overview

1. General Project Information

Ravenswood Development proposes to construct, own and operate stand-alone battery-based energy storage facilities on property of the existing Ravenswood Generating Station. The Project will include enough batteries to supply up to a maximum of eight hours of storage

capacity at its rated output and will be able to charge and discharge at up to 316 MW of power. The facility would be able to provide peak capacity, energy, and ancillary services and enhance grid reliability in New York City (NYISO Zone J). As described in the next section, development of the Project is proposed in three phases. *Exhibit 3* shows a conceptual site arrangement for the Project.

The Project would not generate any new electricity, but would store electricity drawn from the grid and generated at other facilities. Stored energy would then be released to the grid in accordance with NYISO and ConEd's system operating requirements. The proposed energy storage facility would be a net consumer of electricity from the grid. The facility would be operated by Ravenswood Development on a stand-alone basis and its operation would be independent from the operation of Helix Ravenswood's generating facilities.⁷

The Project would use lithium-ion batteries to absorb electrical energy from and discharge electrical energy to the power grid. The batteries would be connected in series and in parallel to provide the total energy storage capacity. Each battery module will be a sealed, finished, Underwriters Laboratories (UL) listed product installed as a component in battery racks inside a building. The racks would be arranged in rows with aisles for access, and would be bolted securely to the floor. Each module would contain integrated safety systems to actively monitor electrical current, voltage, and temperature to optimize performance and to provide early detection and mitigation of potential failures. There would be no venting or emissions release from the individual cells, cell packs, or casings and the batteries would not be opened for use, maintenance, or other purposes on the Project Site or the Ravenswood Generating Station site. A

⁷ For efficiency, the Project may share maintenance and service personnel with other site facilities, but operations would be independent.

Relay and Communications system would be provided in the Project buildings for automated monitoring and management of the batteries to ensure design performance and system life.

The initial Project design contemplates three battery buildings. The batteries will connect to bi-directional, skid-mounted battery inverters. The inverters are expected to be located outdoors in a weatherproof enclosure and connected to the batteries via cable trays or underground conduit inside the buildings, and cable trays, underground conduit or buried cables outside, though some inverter units may be situated inside the buildings depending on final design. The initial Project design includes up to 136 inverters that will be connected in pairs to up to 68 generator step-up transformers, which will all connect to two larger plant step-up transformers via underground cables and two switchgears.

The Project's step-up transformers will connect to a new 345 kilovolt (kV) and/or 138 kV gas insulated substation (GIS substation) to be licensed, constructed, owned, and operated by ConEd within the existing Ravenswood Generating Station. The interconnection will be licensed, constructed, owned, and operated by ConEd in accordance with an Interconnection Service Agreement administered by NYISO. The new substation is anticipated to be located adjacent to the proposed battery storage project and will tap existing transmission lines passing underneath the Project Site and Vernon Boulevard from the nearby Rainey Substation operated by Con Edison.

The Project would be designed and constructed to comply with all applicable codes and requirements. The buildings would be outfitted with fire suppression equipment to meet or exceed applicable fire safety codes and standards. Water sprinkler or mist systems would also be provided as required by the fire code. ***Exhibit 4*** is a preliminary list of engineering codes, standards and guidelines that Ravenswood Development expects to conform to in relation to the

design, development and construction of the Project, including several codes that will voluntarily be complied with.

By storing energy available from the grid during off-peak periods, and making that stored energy available during peak demand periods, the need for additional generation in New York City during such periods would be reduced. Additionally, the batteries would be capable of providing other essential ancillary services to the grid, such as reserves, regulation and voltage support. The proposed Project would not cause or require any direct emissions to air or any wastewater discharges. The facilities would not require any water for operation other than that required to operate the fire suppression systems and—depending on final design—the HV/AC equipment. The Project would utilize existing grid infrastructure in accordance with the NYISO/ConEd interconnection process and a new GIS Substation on the Ravenswood Generation Station site.

2. Phased Project Development

The Project is anticipated to be constructed in three phases with each battery building constructed in a separate phase as follows:

- **1st Phase:** Southeast Building – up to 129 MW
- **2nd Phase:** North Building – up to 98 MW
- **3rd Phase:** Southwest Building – up to 89 MW

See Exhibit 3.

The Project will require the demolition of up to 16 existing, peaker units and associated equipment currently on the Project Site (Gas Turbine [GT] 04, 05, 06, 07, 08, 09, 10, 11, 2-1, 2-

2, 2-3, 2-4, 3-1, 3-2, 3-3, and 3-4).⁸ Only two of these units – GT 10 and 11 – are currently in service. Notably, the footprint of the Project’s first phase – the Southeast Building – does not encompass the area where GT 10 and 11 are located. Thus, the demolition of these units can be readily coordinated with the phased construction of the Project. The Project will replace up to 316 MW of the peaker units’ capacity on the New York electric system.

During construction, an average of 100 to 120 workers will be on site during the peak construction periods. An appropriate on-site parking plan will be developed adjacent to the Project Site within the Ravenswood Generating Station to accommodate the construction workforce.. Construction activities on the Project are anticipated to occur primarily between the hours of 7:00 AM and 6:00 PM, Monday through Friday. To the extent, overnight, weekend or holiday construction work is required, Ravenswood Development (or its contractor) will secure prior authorization consistent with the City Code. Overnight, weekend or holiday construction hours may also be required for utility-related activities that interface with the ConEd transmission and distribution facilities. If this occurs, Ravenswood Development will coordinate with ConEd and comply with its existing operating protocols.

The proposed commercial operation date for the first phase of the Project is in March 2021. Work on the second and third phases of the Project will be determined in response to several factors including evolving governmental rules, incentives, and market initiatives.

⁸ The Project will also require the demolition of an existing office building, the removal of a temporary storage facility, and the relocation of certain existing structures (e.g., fuel line, fire hydrants).

C. Regulatory Review

Development and operation of the Project is expected to require or involve the following additional notable and discretionary federal, state and local regulatory agency notifications, reviews, actions, permits and approvals:

New York State Public Service Commission (NYSPSC)

- Section 68 Certificate of Public Convenience and Necessity
- Section 69 financing approval
- Lightened regulation confirmation
- State Environmental Quality Review Act

New York State Department of Environmental Conservation (NYSDEC)

- NYSDEC State Pollutant Discharge Elimination System (“SPDES”) General Permit for Stormwater Discharges from Construction Activity
- Individual Industrial SPDES Permit Modification
- NYSDEC, Natural Heritage Program (NYNHP) Threatened and Endangered Species Inventory Review

New York State Office of Parks, Recreation, and Historic Preservation

- New York State Parks, Recreation and Historic Preservation Law, Section 14.09: Cultural Resource Review
- National Historic Preservation Act, Section 106: Cultural Resource Review

City of New York

- Construction Permit(s) and related design plan reviews (Department of Buildings)
- Excavation and Demolition Permit(s) (Department of Buildings)
- New York City Waterfront Revitalization Plan (WRP) Consistency Review (Department of City Planning)
- Letter of No Objection re Technology Management and Hazmat Operations (Fire Department)
- Fill Material Operations permit (Sanitation Department)

New York Independent Service Operator (NYISO)

- Large Generator Interconnection Process

U.S. Fish and Wildlife Service (USFWS)

- Threatened and Endangered Species Review and Consultation

This petition is seeking a CPCN from the Commission pursuant to PSL § 68, as well as confirmation that Ravenswood Development will be lightly regulated. The approvals sought through the Petition triggers SEQRA. A completed expanded environmental assessment form with supporting documentation is being submitted with this filing. Details concerning the assessment are addressed in the next section. PSL § 69 financing approval will be sought at a later date.

A modification to the Ravenswood Generating Station Individual Industrial SPDES Permit will be pursued based on the Project's detailed design and coverage under a SPDES General Permit for stormwater discharges from construction activity will be secured closer to the commencement of on-site activities.

Ravenswood Development has conferred with the NYSDEC Natural Heritage Program for purposes of threatened and endangered species inventory review. Ravenswood Development has completed consultation with the Office of Parks, Recreation and Historic Preservation for purposes of New York State Parks, Recreation and Historic Preservation Law, Section 14.09 and National Historic Preservation Act, Section 106 review.

Applications to the City of New York for required approvals will proceed based on the Project's detailed design.

Two interconnection requests have been filed with the NYISO to support the Project, one for 129 MW and subsequently one for 187 MW. The request for 129 MW has been approved by the NYISO Transmission Planning Advisory Subcommittee (TPAS) for System Reliability Impact Study (SRIS) review – and is currently being studied by the NYISO. Ravenswood

Development, LLC anticipates entering the 129 MW request into the 2019 Class Year Facilities Study. These requests can accommodate the interconnection of the maximum size of all three phases of the Project.

IV. ENVIRONMENTAL REVIEW OF THE PROJECT

Accompanying this Petition, Ravenswood Development submits an Expanded Environmental Assessment Form (“Expanded EAF”) under the New York State Environmental Quality Review Act (“SEQRA”). *See Exhibit 5.* Ravenswood Development requests that the Commission assume Lead Agency status over the SEQRA review of the proposed Project, since the Commission’s authority under PSL § 68 gives the Commission principal responsibility for authorizing the Project.

As demonstrated in the Expanded EAF, the Project will not result in any significant adverse environmental impacts. The Project is compatible with existing land uses, and it will avoid or minimize adverse effects to air quality, water resources, noise, traffic and transportation, visual resources, community facilities and natural resources. The need for additional fossil fuel generation and associated emissions during such periods will be reduced as a result of the Project’s ability to store energy available from the grid during off-peak periods and make that stored energy available during periods of peak electric demand. This section summarizes the assessment of impacts in the Expanded EAF, by relevant potential impact areas.

Existing Land Uses. The Project is compatible with existing land uses within the quarter-mile radius study area, as well as the general surrounding area, and will not result in significant adverse impacts to land use. The proposed Project will occupy a portion of the existing Ravenswood Generating Station and will not inhibit the use of the Station. The Project is not expected to have a significant environmental impact due to its proposed clean technology as

well as its location within the Station among existing electric generating facilities. The Project is a continuance of the Site's existing land use, which has co-existed with ongoing adjacent and nearby land uses.

NYC Zoning Resolution: M3 District Use Regulations. The Project is consistent with the New York City Zoning Resolution. The Project site is zoned for industrial or heavy manufacturing purposes (M3-1 district), which are designated for areas with heavy industries that generate noise, traffic or pollutants. The Project is consistent with typical uses of M3 districts, which include power plants, and the Project is within a classified use group that includes electric utility substations and electric power generating plants. As an energy storage facility, the Project is permitted as-of-right in the M3-1 district.

NYC Zoning Resolution: M3 District Performance Standards. The Zoning Resolution sets out performance standards for M3 use districts, addressing noise, vibration, smoke and emissions, dust, toxic matter, fire and explosive hazards, and humidity, heat, and glare. As an energy storage facility, the Project will not produce vibrations, smoke or air emissions, dust or other particulates, toxic matter, humidity, heat, or glare. The Project will not store explosive hazardous materials. The batteries can be classified as a Class I material which is permitted in manufacturing zones.⁹ The buildings will be outfitted with fire suppression equipment to meet or exceed applicable fire safety codes and standards. As a result, the Project conforms to the Zoning Resolution's performance standards for those parameters.

⁹ According to Section 42-272 of the City's Zoning Resolution, a Class I material includes "slow burning to moderate burning materials. This shall include all liquids with an open cup flash point of 182 degrees F. or more."

The Project will produce some noise from air-conditioning units, inverters, transformers, and step-up transformers, and that noise is regulated under the NYC Zoning Code and the NYC Noise Code. The Project's design specifications incorporate sound-attenuating enclosures for the Project inverters and transformer skids. With the incorporation of these design elements, predicted noise levels from the Project are not expected to exceed the criteria in §24-232 of the NYC Noise Code or the noise level criteria set forth in the NYC Zoning Resolution Performance Standards for Manufacturing Districts in any of the octave band frequencies. The anticipated worst case incremental change in noise levels over existing noise levels is less than 3 dBA, which is a barely perceptible change, and below NYSDEC thresholds for further mitigation.

Construction of the Project will generate noise from construction equipment, construction vehicles, and delivery vehicles traveling to and from the Project Site. Noise levels caused by construction activities will vary, depending on the phase of construction and the specific task being undertaken. All construction activities will be conducted in full compliance with existing regulations, including use of mufflers on all construction equipment, as well as local day and hour construction limitations. Construction equipment will meet specific noise emission standards under applicable state and federal requirements. Moreover, construction activities will take place behind the approximately eight-foot brick security wall along the property's perimeter, which will mitigate potential construction noise impacts to the neighborhood east of the Project Site.

NYC Zoning Resolution: Bulk Regulations. The Zoning Resolution also sets out bulk and dimensional regulations. The Project's design complies with requirements for floor area ratio and yard setbacks. Since the storage facility will be able to utilize existing personnel at the Ravenswood Generating Station, the Project will not require additional off-street parking or off-

street loading beyond what is already available at the Ravenswood Generating Station, so the Project complies with those standards of the Zoning Resolution.

NYC Zoning Resolution: Waterfront Blocks and Flood Hazard Areas. The Zoning Resolution also contains special bulk regulations for Waterfront Blocks and Flood Hazard Areas, and the Project site is partially located within both areas. The Project will comply with all applicable bulk and design regulations for those areas; further, based on its Use Group under the Zoning Resolution, the Project is exempt from numerous provisions of those special regulations.

Local Waterfront Revitalization Plan. The proposed Project is consistent with the New York City Local Waterfront Revitalization Plan, as discussed and demonstrated in Appendix D of the Expanded EAF.

Community Facilities and Services. The Project will not displace or alter public or publicly-funded community facilities or services. An average of 100 to 120 workers will be required during the Project's peak construction periods. During operation, the Project will be able to utilize existing personnel at the Ravenswood Generating Station. Therefore, the required workforce will have a minimal impact on the number of people in the community using community facilities or services.

Cultural Resources. A cultural resources review was conducted under the New York State Historic Preservation Office ("SHPO") Environmental Review Program, which includes Section 106 of the National Historic Preservation Act ("NHPA") of 1966; Section 14.09 the Parks, Recreation and Historic Preservation Law; and SEQRA. There are no National Register-listed or State Register-listed historic sites on the Project Site. Within the quarter-mile study area, there is one NRHP-listed building, located on Roosevelt Island to the west of the Project Site. In addition, the Project Site is located adjacent to the Harbor Park NYS Heritage Area. Since the

Project will be located within the existing Ravenswood Generating Station with minimal potential underground off-site interconnections, the Project will not result in impacts to cultural resources. On December 4, 2018, the New York OPRHP confirmed that the Project will have no impact on archaeological and/or historic resources listed in or eligible for State or National Registries of Historic Places. As the Project will not entail work within the East River, the Project will not have an adverse impact on the Harbor Park NYS Heritage Area.

Visual Resources. The Project is not anticipated to have adverse visual impacts to surrounding areas. Potential impacts were assessed with respect to several visual resources, and the assessment was performed under NYSDEC's July 31, 2000 Program Policy titled *Assessing and Mitigating Visual Impacts*. As the Project is located within the existing Ravenswood Generating Station and will replace existing electric generation infrastructure, visual impacts to sensitive resources will be limited. The Site's sloping grade towards the East River and the presence of the existing brick security wall will limit visibility at street level from Vernon Boulevard and areas to the east. The Site's slope and 36th Street transition to the Roosevelt Island Bridge will limit visibility from the north. Considering that aging peaker unit structures and equipment will be replaced by new battery storage buildings built to current code and architectural standards, views from the East River and Roosevelt Island will not be adversely impacted and will be compatible with the existing Ravenswood Generating Station components.

Socioeconomics and Environmental Justice. The NYSDEC identifies Potential Environmental Justice ("Potential EJ") Areas, based on the 2000 U.S. Census block groups and percentages of the population that are members of minority groups or are below the federal

poverty level. According to NYSDEC's Potential EJ Mapping by County,¹⁰ the Project Site is located within a Potential EJ Area, and other Potential EJ Areas are within the quarter-mile study area. The Project will not have an adverse or disproportionate effect on the Potential EJ Areas. The Project will produce beneficial effects on air quality (replacing energy from combustion turbines with energy storage technology), will have no significant adverse visual impacts, and will comply with State and City noise standards, and as a consequence, will not result in adverse noise impacts.

Traffic and Transportation. The Project is located within the existing Ravenswood Generating Station, which is accessed from Vernon Boulevard, and is accessible by public transportation, including the subway (F train) and public bus (Routes 102 and 103). During construction, anticipated Project-related traffic will consist of commuting construction workers and material/equipment deliveries. An average 100 to 120 workers will be on Site during peak construction periods, and construction hours are expected to be between 7:00 AM and 6:00 PM during weekdays. Construction parking and staging areas will be accommodated within the Ravenswood Generating Station, and access will be through the existing security gate or the secure shipping entrance off Vernon Boulevard. It is anticipated that Project-related deliveries and construction crews will use the Grand Central Parkway (I-278) and the Long Island Expressway (I-495) from the east and west, and will use NYSDOT-designated truck routes (e.g., Astoria Boulevard and Vernon Boulevard) to the Station entrances. Deliveries can be dispersed throughout the day to avoid the roadway peak hours. Based on the limited number of construction workers, the temporary construction of the Project will not have a significant impact

¹⁰ NYSDEC, Potential Environmental Justice Areas in Queens County, New York, available at https://www.dec.ny.gov/docs/permits_ej_operations_pdf/queensej.pdf.

on traffic operating conditions, and the existing traffic roadway network will be able to support the anticipated construction-related traffic without improvements.

After construction, the Project's operation can utilize existing personnel at the Ravenswood Generating Station and therefore is not expected to add any additional traffic in the area. Therefore, Project-related traffic during operations will not have a significant impact on traffic operating conditions and the existing traffic roadway network.

Contaminated Materials. Prior investigations of the Ravenswood Generating Station have disclosed the presence of former manufactured gas plant residuals (including dense and light non-aqueous phase liquids (DNAPL and LNAPL, respectively)), constituents of petroleum, and other contaminants. NYSDEC has recorded several spills of petroleum and other substances at the Station site. Groundwater conditions are monitored by a network of 71 monitoring wells at the Ravenswood Generating Station, some of which are located on the project site. The Project will require relocation of a number of the LNAPL monitoring wells. Accordingly, a revised remediation work plan for well relocation will be developed by Ravenswood Development and submitted to the NYSDEC for review and approval prior to construction. The revised work plan will ensure that remedial activities continue as required. Contaminated materials encountered in excavations will be characterized for proper off-site disposal at an appropriately licensed facility or, where feasible, reused on-site with appropriate engineering and institutional controls.

Water Resources. The Project Site is adjacent to the East River, and a portion of the river along the site's bulkhead is a NYSDEC-mapped Tidal Wetland, classified as Littoral Zone. The Project will not result in adverse impacts to the East River or to the mapped Tidal Wetland. All Project activities will occur behind the existing bulkhead that runs along the East River, and appropriate erosion and sediment controls will be installed during construction in accordance

with a Soil Erosion and Sediment Control Plan. During operations, the Project's stormwater will be managed through the Station's existing stormwater system and permit. There are no state-jurisdictional or federal-jurisdictional wetlands or surface waters on the Project Site, so the Project will not have any impact to on-site wetlands or surface waters.

Floodplains. Federal Emergency Management Agency ("FEMA") flood insurance rate maps ("FIRMs") indicate that portions of the Ravenswood Generating Station are located within the 100-year and 500-year floodplains of the East River. Based on the preliminary FEMA FIRM mapping, which has been adopted by the New York City Building Code, the 500-year floodplain elevation at the Ravenswood Generating Station ranges between 14 feet and 15 feet (referenced to NAVD 88), and the preliminary 100-year floodplain elevation is 12 feet (NAVD 88). All Project structures located within the flood hazard area will have a minimum design flood elevation of 2.5 feet above the base flood elevation of 12 feet. As such, the Project will conform to the applicable code requirements with respect to floodplain development.

Terrestrial Resources. Terrestrial resources evaluated within and surrounding the Project site include vegetation, wetlands, wildlife, and endangered or threatened species. The Project's location within an existing generating station reduces potential impacts to those resources. In particular, there is no suitable habitat for threatened or endangered species and it is not expected that any of these species is present on the Project Site.

Positive environmental impact. The proposed Project will ultimately have a positive environmental impact. By storing energy available from the grid during off-peak periods and making that stored energy available during periods of peak electric demand, the need for additional generation in New York City during such periods will be reduced. This type of development is additionally attractive for New York City as it pursues a goal of reducing or

eliminating fossil fuel peaking facilities in the city as part of the Commission’s Energy Storage Deployment Order and the broader goals of the REV. The proposed Project will not cause or result in any direct emissions to air or process discharges to any surrounding waterbodies, nor will it require any water for operation beyond that required to operate fire protection systems or result in any sanitary discharges. The Project will take advantage of existing electric grid infrastructure on or adjacent to the Project Site and should ultimately improve the reliability of the New York City electric grid through the construction of a new, modern Gas Insulated Substation.

In light of the assessment in the Expanded EAF, Ravenswood Development respectfully requests that the Commission determine that the Project will not have any significant adverse environmental impacts, and issue a Negative Declaration under SEQRA.

V. DISCUSSION

A. *Ravenswood Development Seeks a Certificate of Public Convenience and Necessity Pursuant to PSL § 68*

“No . . . electric corporation shall begin construction of a[n] . . . electric plant without first having obtained the permission and approval of the commission.” PSL § 68. Ravenswood Development respectfully seeks a Certificate of Public Convenience and Necessity pursuant to PSL § 68 in order to develop the proposed Project as described herein.¹¹

¹¹ Helix Ravenswood and EnergyStorageCo (now Ravenswood Development) petitioned the New York State Board on Electric Generation Siting and the Environment (Siting Board) for a Declaratory Ruling that the Project is not subject to Article 10 of the Public Service Law (Case Number 18-F-0204). In a letter dated June 22, 2018, the General Counsel to the Siting Board stated that based on prior Siting Board rulings, the Project is not subject to Article 10.

Ravenswood Development will not sell any of the Project’s output at retail.¹² Rather, Ravenswood Development will operate entirely within the wholesale market. As such, Ravenswood Development believes that it should qualify for treatment under a lightened regulatory regime consistent with other wholesale market participants, *see* Section V(B) *infra*, and that application of the requirements of 16 NYCRR 21.3 will be limited accordingly.

The Project’s service of a critical, emerging public need is reinforced by the fact that the facility will replace existing peaker units with no or low capacity utilization and enhance the State’s ability to achieve the Roadmap’s goals of meeting peak demand through use of “clean resources” while improving overall system efficiency and utilization. *See* Case 18-E-0130, *Energy Storage Deployment Program*, Order Establishing Energy Storage Goal and Deployment Policy (Dec. 13, 2018) (“Deployment Order”) at 86.

Important public benefits will accrue if the Ravenswood Development Project becomes operational. The Project will be capable of providing energy storage to potential customers via long-term agreements, and/or provide energy, ancillary services, market efficiency benefits, capacity, and other services to the New York energy market. The Project meets the State’s public policy goals and serves a clear need in promoting a modern and efficient energy system.

In 2014, Governor Cuomo launched the Reforming the Energy Vision (“REV”) policy, which seeks to build a clean, resilient, and affordable energy system for New Yorkers. At the time of REV’s announcement, the State established aggressive energy goals to be achieved by 2030, including a 40% reduction in greenhouse gas emissions from 1990 levels and 50% generation by renewable energy sources such as solar, wind, hydropower, and biomass (the “50-

¹² As a competitive wholesale market participant, Ravenswood Development will not operate a franchised territory to service retail customers. Rather, the Project will be located within ConEd’s

(Continued ...)

by-30 Goal”). The 50-by-30 Goal was formalized in the Commission’s Clean Energy Standard, issued in August 2016.

Energy storage also has received increased attention. A new State Energy Plan was issued in 2015 that builds upon the REV initiative, aggressively promoting the development of distributed energy resources like solar. The 2015 Plan states the following relative to creating a more competitive marketplace for electricity:

New York has one of the most progressive electric utility regulatory and policy regimes in the country. In the mid-1990s, New York was among the first states to develop competitive opportunities for energy generation and retailers. The resulting vigorous and competitive independent power producer sector and wholesale markets provide New York State consumers with lower rates and more energy choices, while creating additional jobs.

2015 Energy Plan, Vol. 1 at 19-20. Recognizing that the State’s energy system is designed to meet peak demand, the plan calls for improvements in the grid’s overall efficiency by pursuing solutions that “reduce or shift peak load such as demand management systems, energy efficiency, and **energy storage**, [which] most often require significantly less capital investment.” *Id.* at 28 (emphasis added). The plan explicitly recognizes energy storage as part of a more cost-effective and clean energy system. *Id.* at 55. The Project will make a significant contribution towards these goals.

In 2017, the Legislature adopted Section 74 of the PSL (amended in 2018), entitled *Energy Storage Deployment Policy*, directing the Commission, in consultation with the New York State Energy Research and Development Agency (“NYSERDA”) and NYISO, to establish “a [2030] energy storage goal for the state and a deployment policy to support that goal.” In June 2018, Governor Cuomo announced New York’s Energy Storage Roadmap, which

(...Continued)
franchised service territory.

identifies the need for rapid expansion of New York’s energy storage capabilities, as well as the goals and strategy for achieving a more modern energy system in New York.

“[T]he Roadmap provides a comprehensive strategy to encourage the deployment of 1,500 megawatts (MW) of energy storage by 2025, and a 2030 energy storage deployment target of up to 3,000 MW” and, as the Commission has explained:

Energy storage will be a critical component in enabling renewables to provide the needed amount of penetration to reduce GHG emissions sufficiently to satisfy the [Clean Energy Standard] and State Energy Plan targets.

Deployment Order at 3, 4.

To achieve deployment goals, the Commission directed utilities to issue requests for proposals (“RFPs”) for energy storage capacity in 2019, and specifically directed ConEd to “procure at least 300 MW.” Deployment Order at 55. The Commission recognized that:

The energy storage asset may be sited anywhere in the utility’s transmission and distribution system. Specific locations of higher system value shall be indicated in the RFP. For example, differentiated local reliability or load relief values could be based upon the interconnection level. Similarly, local environmental benefits could be based upon siting at an existing peaking unit plant with corresponding operational requirements.

Deployment Order at 54.

Ravenswood Development is extremely well situated to respond to ConEd’s 2019 RFP. Further, the Project’s phased development approach is consistent with the Commission’s directive to utilities to issue “subsequent annual procurements as necessary” to meet the State’s energy storage deployment goal, and will be able to take advantage of other regulatory initiatives and market opportunities.

The Project is also consistent with New York City’s energy policies and goals. Through its OneNYC initiative, the City of New York is seeking to become the most resilient, equitable

and sustainable city in the world. OneNYC includes an aggressive goal of reducing its greenhouse gas (GHG) emissions 80 percent by 2050 (80×50), compared to 2005 levels. *See* <https://onenyc.cityofnewyork.us/goals/80x50/>. In 2016, the City published a Roadmap to achieve the 80×50 goal, targeting strategies for the buildings, energy, waste, and transportation sectors. For example, the Department of Citywide Administrative Services is “deploying energy storage technologies to help the City increase the resiliency of critical infrastructure.” By replacing existing fossil fuel peaker units with a state-of-the-art energy storage facility, the Ravenswood Development Project represents a significant private sector contribution to achieving the City’s 80-50 goal.

NYISO is responsible for operating the state’s bulk electricity grid. In 2009, the Federal Energy Regulatory Commission (“FERC”) approved changes to NYISO’s tariff to integrate energy storage devices into day-ahead and real-time regulation service markets.¹³ 127 FERC ¶ 61,135 (May 15, 2009). NYISO’s 2018 Power Trends report explains: “NYISO anticipates a new participation model to **fully exploit the capabilities that new storage technologies can offer in terms of balancing system variability and supplying capacity during critical peak periods.**” 2018 Power Trends, at 39 (emphasis added). The Project will draw energy from the grid during non-peak periods so its energy will be available to meet peak demand.

¹³ In February 2018, FERC issued an order pursuant to the Federal Power Act to “remove barriers to the participation of electric storage resources in the capacity, energy, and ancillary service markets operated by Regional Transmission Organizations (RTO) and Independent System Operators (ISO) (RTO/ISO markets). Specifically, we require each RTO and ISO to revise its tariff to establish a participation model consisting of market rules that, recognizing the physical and operational characteristics of electric storage resources, facilitates their participation in the RTO/ISO markets.” 162 FERC ¶ 61,127 (Feb. 15, 2018).

The Project will be designed, constructed and operated in a manner that supports safe, reliable and adequate service. Because Ravenswood Development will be operating in a competitive wholesale market, the Project will not pose a risk to ratepayers or New York City residents. Based on the foregoing, Ravenswood Development respectfully requests that the Commission grant the Project a CPCN pursuant to PSL § 68.

B. The Commission Should Declare that the Project will be Regulated Under a Lightened Regulatory Regime as Consistently Applied to Other Wholesale Market Participants

Ravenswood Development respectfully requests that it be regulated under a lightened regulatory regime similar to the regimes that the Commission has accepted, under its realistic appraisal test, for independent power producers engaged in selling electric energy exclusively at wholesale. Such a regime will provide Ravenswood Development with requisite flexibility to operate as a wholesale power market participant.

The Commission has issued numerous rulings that consistently apply a lightened regulatory regime to wholesale providers of electricity. *See* Case 10-E-0042, *AES ES Westover, LLC*, Order Providing for Lightened Regulation and Approving Financing (May 14, 2010) (phased energy storage project); Case 11-E-0593, *Cricket Valley Energy Center, LLC*, Order Granting a Certificate of Public Convenience and Necessity and Establishing Lightened Ratemaking Regulation (Feb. 14, 2013); Case 05-E-0098, *Caithness Long Island, LLC*, Order Granting a Certificate of Public Convenience and Necessity, Providing for Lightened Regulation and Approving Financing (Nov. 15, 2006); Case 04-E-0428, *NYC Energy, LLC*, Order Granting A Certificate of Public Convenience and Necessity and Providing for Lightened Regulation (July 9, 2004); Case 01-E-1716, *KeySpan-Port Jefferson Energy Center, LLC*, Order Providing for Lightened Regulation (March 7, 2002); Case 99-E-0148, *AES Eastern Energy, L.P. and AES*

Creative Resources, L.P., Order Providing for Lightened Regulation (April 23, 1999); Case 98-E-1670, *Carr Street Generating Station, L.P.*, Order Providing for Lightened Regulation (April 23, 1999); Case 91-E-0350, *Wallkill Generating Company, L.P.*, Order Establishing Regulatory Regime (April 11, 1994). These decisions all support the Commission's position that "it is no longer necessary or appropriate to apply some of the provisions of the Public Service Law to merchant plants . . . that operate exclusively in the wholesale market." *Carr Street* at 5-6. Such a position is justified because:

the legislative purpose in enacting the Public Service Law was to ensure that the monopoly electric service providers charged only "just and reasonable rates" for electric services, and we have now determined that those rates are best achieved through market competition.

Id. at 5. Therefore, certain PSL provisions should not apply to wholesale market participants such as Ravenswood Development.

Under a lightened regulation scheme, the Commission performs a realistic appraisal to ascertain the PSL requirements that should be imposed on participants in the wholesale electric market. *Carr Street* at 7. In previous decisions utilizing such an appraisal, when a facility meets the definition of an electric corporation under PSL § 2(13) and is engaged in activities subject to PSL §5(1)(b), the Commission has determined that certain PSL Articles are entirely inapplicable, while others are partially inapplicable.

The Commission has previously determined that most provisions in Article 1 remain applicable. PSL §§ 11, 19, & 24 – 26, which prevent sellers of electricity from taking actions that are contrary to the public interest, have been determined to be applicable to wholesale generators. However, the PSL § 18-a assessment, which is only applicable to gross retail revenues, is not applicable to a wholesaler selling exclusively in interstate markets. *See AES ES*

Westover at 5; *Cricket Valley* at 32. Thus, PSL § 18-a should be determined to be inapplicable to Ravenswood Development as long as it continues to sell its power in wholesale markets.

Since Article 2, by its own terms, only applies to the provision of service to retail residential customers, it is entirely inapplicable to wholesale generators such as Ravenswood Development. *See AES ES Westover* at 5; *Cricket Valley* at 32; *Caithness Long Island* at 54. Likewise, parts of Article 4 are also restricted to retail service and should not be applied to wholesale market participants. The following Article 4 Sections should be inapplicable to Ravenswood Development: 66(12) (filing of tariffs), 66(21) (storm plans), 67 (meter inspections), 72 (hearing and rate proceedings), 75 (excessive charges) and 76 (rates charged religious bodies and others). *See AES ES Westover* at 5; *Cricket Valley* at 32; *Caithness Long Island* at 54.

Other Article 4 Sections are potentially applicable to wholesale market participants, but are implemented in a fashion that limits their impact in a competitive market. Applicable or potentially applicable Article 4 Sections are PSL §§ 66(6) (annual report), 68 (certificate of public need and necessity), as well as 69, 69-a and 70 (providing review of securities issuances, reorganizations and transfers of securities, works or systems). The Commission has developed a standardized form for wholesale participants to utilize to comply with the Section 66(6) annual reporting requirement. *See AES ES Westover* at 6; *Cricket Valley* at 33. In this instance, Ravenswood Development is seeking a Section 68 Certificate in conjunction with its petition for lightened regulation application, and will seek financing approval at a later date.

With respect to PSL § 70, “it was presumed in the Carr and Wallkill Orders that regulation would not ‘adhere to transfer of ownership interests in entities upstream from the parents of a New York competitive market participant subsidiary, unless there is a potential for

harm to the interests of captive utility ratepayers sufficient to override the presumption.’

Wholesale market participants were also advised that the potential for the exercise of market power arising out of an upstream transfer would be sufficient to defeat the presumption and trigger PSL §70 review.” *AES ES Westover* at 6; *See also Cricket Valley* at 35. *See also* Case 12-E-0197, *Caithness Long Island , LLC et al.*, Order Approving Transfers and Declaratory Ruling Concerning Financing (July 12, 2012) (clarifying that a transfer in ownership of the direct owner of an electric plant, even if an intra-corporate reorganization, is subject to Section 70 review). Thus, PSL § 70 is generally triggered only when market power issues may arise. As a result, Ravenswood Development understands that the Commission may seek access to its records to confirm that the presumption remains valid. Though the specific details have not been determined, Ravenswood Development will enter into an agreement with Helix Ravenswood to permit it to develop and use the Project site. The Commission has confirmed that it does not review or approve transfers of property between two subsidiaries of the same ultimate upstream parent under lightened regulation. *AES ES Westover* at 6, n 4.

As with Articles 2 and 4, several of the Sections in Article 6 do not apply, while others do. Sections determined to be inapplicable to wholesalers because they pertain to retail service are: PSL §§ 112 (rate order enforcement), 113 (reparations and refunds), 114 (temporary rates), 114-a (exclusion of lobbying costs from rates), 116 (water service discontinuance), 117 (consumer deposits), 118 (payment to an authorized agent), 119-a (utility poles and conduits), and 119-c (tax reductions). The Commission has, however, determined that Section 119-b, which regulates the protection of underground facilities from damage by excavators, should apply. Additionally, the Commission has exercised its discretion not to impose PSL § 115, which addresses competitive bidding of utility purchases, on wholesalers. The Commission has

further determined that other provisions generally need not be imposed on wholesalers, including PSL §§ 106 (loan approvals), 107 (use of utility revenues), 108 (corporate merger and dissolution), 110(3) (contracts between affiliated interests) and 110(4) (purchase contracts). *See AES ES Westover* at 7; *Cricket Valley* at 36-37.

For an applicant that is affiliated with a power marketer, compliance with PSL § 110 (1) & (2), to the extent relevant, has been required. Where an applicant wholesale generator is affiliated with a power marketer potential market power issues can arise. Ravenswood Development has an indirect affiliation with LifeEnergy, a power marketer, but LifeEnergy is not currently operating in New York State and Ravenswood Development will not sell energy through LifeEnergy. Similarly, as noted above, Ravenswood Development is affiliated with CPower, which provides demand-side energy management services to commercial, industrial and government organizations. CPower will not market energy provided by the Project. *See Case 07-E-0138, Canandaigua Power Partners, LLC, Order Granting Certificate of Public Convenience and Necessity, Providing for Lightened Regulation and Approving Financing* (Aug. 16, 2016). Thus, the Commission should not impose the requirements of Article 4 on Ravenswood Development except for PSL § 119-b and at most conditionally impose PSL § 110(1) and (2) as discussed above.

It is both consistent with the foregoing Orders and warranted by the public interest in fostering competition in wholesale power markets for the Commission to apply the lightened regulation scheme, as outlined above, to Ravenswood Development.

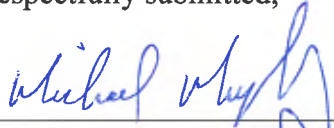
VI. CONCLUSION

Based on the foregoing, Ravenswood Development respectfully requests that the Commission issue an Order: (1) granting Ravenswood Development a Certificate of Public

Convenience and Necessity pursuant to PSL § 68 and 16 NYCRR Part 21 to develop, operate and own the Project; and (2) providing that Ravenswood Development will be regulated under a lightened regulatory regime consistent with the Commission's orders providing for lightened regulation for competitive wholesale market participants.

February 21, 2019

Respectfully submitted,



Michael Murphy, Esq.
John H. Paul, Esq.
Beveridge & Diamond, P.C.
477 Madison Avenue, 15th Floor
New York, NY 10022
(212) 702-5400

Attorneys for Ravenswood Development, LLC

VERIFICATION

STATE OF New York)
)
COUNTY OF New York) ss.:

Carolyn Murff, being duly sworn, deposes and says: that she is an officer of Ravenswood Development, LLC; that she has read the foregoing petition and knows the contents thereof; and that the same is true to her own knowledge except as to matters set forth therein to be upon information and belief, and as to those matters she believes them to be true.



Carolyn Murff, Senior Vice President
Ravenswood Development, LLC

Sworn to before me this
19th day of February, 2019



NOTARY PUBLIC

